UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

UNITED STATES OF AMERICA,	:	Case No. 1:17-cr-009
	:	
vs.	:	Judge Timothy S. Black
	:	
BRUCE LEE FELIX,	:	
	:	
Defendant.	:	

ORDER GRANTING IN PART AND DENYING IN PART THE GOVERNMENT'S MOTION *IN LIMINE* TO EXCLUDE THE TESTIMONY OF DEFENDANT'S EARWITNESS EXPERT (Doc. 61)

This criminal case is before the Court on the Government's motion to exclude the testimony of Defendant's proposed earwitness expert (Doc. 61) and Defendant's response in opposition (Doc. 65). The Court also has before it Defendant's proposed expert's written report. (Doc. 70).

I. BACKGROUND

On January 18, 2017, Defendant Bruce Lee Felix was charged by way of a three-count indictment with the following offenses: bank robbery, in violation of 18 U.S.C. § 2113(a) (Count 1); armed bank robbery, in violation of 18 U.S.C. § 2113(a), (d) (Count 2); and using, carrying, and brandishing a firearm during and in relation to a crime of violence, in violation of 18 U.S.C. § 924(c)(1)(A) (Count 3). (Doc. 1). The case is scheduled for jury trial starting on July 1, 2019.

At trial, Defendant intends to introduce the testimony of a proposed earwitness expert, Al Yonovitz, Ph.D., to testify regarding the propriety and reliability of the voice

identification procedures conducted during the investigation of this case.[1] As stated in

his written report (Doc. 70), Dr. Yonovitz opines:

> (1) [Contrary to the] proper procedure for an earwitness procedure [as adapted from the Department of Justice's visual identification guidelines] … [i]n this particular case a <u>novel, untested and unreliable method was used to obtain the opinions of six ear witnesses. It was an</u> **<u>inappropriate procedure that introduced substantial bias</u>** <u>by the listeners.</u> ("Opinion 1").
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> (2) The voice of [Defendant] Mr. Bruce Felix was analyzed for any anomalies, disfluencies, or any feature that would draw attention to the voice. None were found. ("Opinion 2").
>
> (3) The research related to memory for voices is relevant to the results obtained by the police investigator. … Memory for voice decays rapidly and identification accuracy is greatly reduced. ("Opinion 3").
>
> (4) The audio of the recorded traffic stop was extracted from the video. It was of poor quality recorded with traffic noise. The signal was enhanced and clarified for analysis. Very poor acoustics would be realized with the use of laptop sound system. Also the hearing acuity of the listeners could be a factor. ("Opinion 4").

(*Id*. at 14) (emphasis in original).

The Government objects to the proposed expert testimony, arguing that it fails to

meet the reliability and relevancy requirements of Fed. R. Evid. 702 and *Daubert*. (Doc.

61). Specifically, the Government's primary argument is that the proposed testimony is

"unnecessary and largely irrelevant," that it "would invade the province of the jury," and

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[1] This Court previously DENIED Defendant's motion to suppress the pretrial voice identifications (Doc. 45), and has also orally DENIED the Government's motion to exclude the expert testimony pursuant to Fed. R. Crim. P. 16(d)(2) (Min. Entry, June 19, 2019).

that it "would confuse the jury rather than aid the jury's understanding of the issues." (*Id*. at 2-5). The Government also questions the scientific reliability of earwitness expertise and the research upon which Dr. Yonovitz's opinions are based. (*Id*. at 5-6). Finally, the Government argues that Dr. Yonovitz's opinions regarding the voice identification procedure used in the instant case are contrary to his own assertions regarding the inherent unreliability of voice identifications in general and, accordingly, his opinions would only serve to confuse the jurors. (*Id*. at 6-7).

As stated fully below, the Court finds that Dr. Yonovitz's Opinions 2 and 4 are appropriate and admissible to assist the jury's consideration of the victim's voice identifications. However, the Court declines to permit testimony regarding the propriety of the procedures, as articulated in Opinion 1, or the decay of voice memory articulated in Opinion 3.

II. STANDARD OF REVIEW

"A ruling on a motion in limine is no more than a preliminary, or advisory, opinion that falls entirely within the discretion of the district court." *United States v. Yannott*, 42 F.3d 999, 1007 (6th Cir. 1994) (citations omitted). "Motions in limine are generally used to ensure evenhanded and expeditious management of trials by eliminating evidence that is clearly inadmissible for any purpose." *Ind. Ins. Co. v. Gen. Elec. Co.*, 326 F. Supp. 2d 844, 846 (N.D. Ohio 2004) (citing *Jonasson v. Lutheran Child and Family Serv.*, 115 F.3d 436, 440 (7th Cir. 1997)). However, "[o]rders *in limine* which exclude broad categories of evidence should rarely be employed." *Sperberg v. Goodyear Tire & Rubber Co.*, 519 F.2d 708, 712 (6th Cir. 1975). Rather, motions *in*

limine are "generally confined to very specific evidentiary issues of an extremely prejudicial nature." *Brown v. Oakland Cnty.*, No. 14-CV-13159, 2015 WL 5317194, at *2 (E.D. Mich. Sept. 10, 2015).

If the evidence is not plainly inadmissible on all potential grounds, the Court's "evidentiary rulings should be deferred until trial so that questions of foundation, relevancy and potential prejudice may be resolved in proper context." *Ind. Ins. Co.*, 326 F. Supp. 2d at 846. Moreover, "[d]enial [or granting] of a motion in limine does not necessarily mean that all evidence contemplated by the motion [will or] will not be admitted at trial …." *Id*. The Court may change its ruling at any point prior to or during the trial, as "facts may … come to the district court's attention which it did not anticipate at the time of its initial ruling." *Yannott*, 42 F.3d at 1007. "Indeed even if nothing unexpected happens at trial, the district judge is free, in the exercise of sound judicial discretion, to alter a previous *in limine* ruling." *Luce v. United States*, 469 U.S. 38, 41-42 (1984).

III. ANALYSIS

Federal Rule of Evidence 702 governs the admissibility of expert testimony. The trial judge must serve a "gatekeeping role," to "ensur[e] that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 597 (1993).

For expert testimony to be admissible, the Court must find that: (A) the expert is qualified; (B) the expert's testimony is reliable; and (C) the expert's testimony is

relevant. *United States v. LaVictor*, 848 F.3d 428, 441 (6th Cir. 2017) (citing *Daubert*, 509 U.S. at 589); Fed. R. Evid. 702.

A. Qualification as an Expert Witness

A witness may qualify as an expert in a particular field based on his "knowledge, skill, experience, training, or education." Fed. R. Evid. 702.

Here, the Government has not disputed Dr. Yonovitz's qualification as an expert witness. Regardless, the Court must undertake its own analysis to determine expert qualification.

In that regard, the Court has reviewed Dr. Yonovitz's curriculum vitae (Doc. 54-1), as well as his qualifications as summarized in his Report (Doc. 70 at 1-3). The Court notes that Dr. Yonovitz holds a Ph.D. in Physiological and Psychological Acoustics (*i.e.*, psychoacoustics). He is also a Professor of Speech and Hearing Sciences and Dean of Research Facilitation at the University of Montana. Moreover, he has published and presented extensively on the science of speech and voice analysis. Dr. Yonovitz has also published and presented, to a significantly lesser extent, on the topic of speaker identification in the context of criminal cases.

In his Report's qualifications summary, Dr. Yonovitz states that his consulting firm "ha[s] been retained in thousands of cases involving thousands of recordings throughout the U.S. [and internationally]," and that his firm has "testified in state and Federal courts in civil, criminal and administrative matters throughout and beyond the United States." (*Id*. at 1-2). While the Court does not doubt the veracity of these statements, the claim does not specify the number of times Dr. Yonovitz has <u>personally</u>

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testified, nor does it specify the number of times a state or federal court in the United

States has found Dr. Yonovitz personally qualified to testify as an expert or the particular

scope of expertise in any such judicial finding of qualification. Accordingly, the Court

has conducted a case law search of Dr. Yonovitz—which search is admittedly

constrained to reported written orders and opinions—to determine whether Dr. Yonovitz

has previously qualified as an expert. The results of the Court's admittedly limited

search indicate that, between 1998 and 2015, Dr. Yonovitz was apparently *retained* in 12

state and federal cases—three of which were civil—and that Dr. Yonovitz apparently

testified as an expert in five cases (although it is not clear whether a judicial officer

specifically found him qualified as an expert in each case). On the other hand, on at least

four separate occasions, a court specifically found either that Dr. Yonovitz was not

qualified as an expert in the field of his proposed testimony or that the methods he used

failed to meet *Daubert*'s reliability standard.[2]

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[2] *Tyson v. Keane*, 991 F. Supp. 314, 328-29 (S.D.N.Y., Jan. 13, 1998) (finding petitioner failed to establish Dr. Yonovitz's "linguistic discourse analysis" was scientifically reliable); *United States v. Jorge Luis Garza*, (S.D. Tex. Jan 8., 2003) (granting the government's motion to exclude Dr. Yonovitz's testimony regarding aural and spectrographic voice identification analysis, which motion (Doc. 261 at 3) notes that Dr. Yonovitz's testimony was similarly excluded in *United States v. Jackson*, No. 4:00-cr-199 (S.D. Tex., June 26, 2000), for "failure to operate in accordance with scientifically accepted standards of analysis"); *Singleton v. Ben Bridge Jeweler, Inc.*, No. 4:07-cv-1689, 2009 WL 3698440, at *3 (S.D. Tex., Jan. 27, 2009) (excluding Dr. Yonovitz's testimony on the topic of memory and recall, finding that "Yonovitz's extensive list of publications is almost exclusively in the areas of audiology, acoustics, and speech … [and therefore] Dr. Yonovitz has not produced sufficient evidence that would qualify him as an expert in the area of cognitive psychology"); *State v. Carter*, 84 So. 3d 499, 515, (La., Jan. 24, 2012) ("The defense sought to introduce Dr. Yonovitz as an expert in voice identification to testify that the voice heard in the background of the recorded phone call was not the victim's. Ultimately, the trial court determined that Yonovitz's techniques did not meet *Daubert* standards and denied his expert qualification").

While the findings of other courts are not determinative, the Court does note that they appear to share a somewhat common theme, which mirrors precisely what this Court found in the instant case, even before conducting any research on Dr. Yonovitz's prior cases. That is—while Dr. Yonovitz appears abundantly qualified to opine (subject to cross-examination) regarding the science of speech, acoustics, and audiology (*e.g.*, identifying whether vocal signatures are present in a person's speech), as well as verifiable technology associated with those field (*e.g.*, extracting and analyzing background noise in a recording), he lacks sufficient expertise, under the standard required for expert opinion testimony in a legal proceeding, to apply that science and opine on the resulting cognitive and psychological impact on the listener (*e.g.*, whether the listener will retain the memory of a voice heard; or whether a victim's voice identification was biased by procedures).

Moreover, Dr. Yonovitz lacks any training in the law or in law enforcement procedures, and he has done relatively limited work in this area. Indeed, much of his publications and presentations in the area of forensic voice identification appear to relate to spectrographic analysis (*i.e.*, the application of technology to voice identification) and historical overviews of legal precedent (which is highly suspect, given the fact that Dr. Yonovitz has no legal training).

Based on his education and experience, the Court concludes that Dr. Yonovitz qualifies as an expert in the science of audiology and voice analysis, such that he has the relevant expertise to testify regarding the scientific characteristics of speech, acoustics, and audiology, as well as verifiable analytic technology used within those field.

However, the Court cannot conclude that Dr. Yonovitz is a qualified expert regarding witness memory, victim perception, or law enforcement procedures.[3]

Thus, while he is qualified to opine on the scientific aspects of voice analysis and audiology (*e.g.*, the auditory impact of heavy traffic noise behind the voice exemplar; or how people generally hear and recognize vocal patterns or signatures), he is not qualified

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[3] Dr. Yonovitz's prior testimony at a suppression hearing in a Texas criminal case is notable in this regard:

> Appellant also called Dr. Al Yonovitz, a professor of hearing and speech, to testify as an expert on voice identification. Dr. Yonovitz testified that "on voice identification specifically for memory, there is a smaller set of research papers and they all tend to agree with each other."
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> …
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> On cross-examination, Dr. Yonovitz … agreed that the "body of **research that has been done in the area of memory and auditory identification is very limited**." He testified that the studies he relied on to support his testimony regarding memory decay for voices were conducted with random volunteers and students in a non-traumatic, sterile research environment, in which the volunteers were read a random passage and later asked to identify the voice of the speaker.
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> Dr. Yonovitz testified that there is no research regarding whether hearing a voice under distressing circumstances has any effect on a listener's memory. Dr. Yonovitz testified that there is no research involving individuals who have experienced a traumatic event and made voice identifications. He stated that he is "not at all familiar with the research that's been done in the area of how the human mind stores sensory memories from a traumatic event [in] another area of the brain." He also stated that **he has "never testified or been qualified as an expert on the issue of memory when it comes to auditory identification;" he "never testified on issues in memory for witnesses, only on matching of voices from an unknown to a known**."

Aviles-Barroso v. State, 477 S.W.3d 363, 386 (Tex. App. 2015) (emphasis added).

to opine on whether law enforcement utilized an appropriate procedure (*e.g.*, that it is

inappropriate for law enforcement to use of a traffic stop as a voice exemplar), nor is he

qualified to opine on the victims' credibility or cognitive abilities (*e.g.*, whether a victim

is likely to have misidentified a voice).

B. Reliability of the Expert Testimony

In *Daubert*, the Supreme Court provided a list of non-exhaustive factors that the

Court may consider in assessing the reliability of scientific expert testimony, including:

> (1) whether the expert's technique or theory can be, or has
> been, tested in some objective sense; (2) whether the technique
> or theory has been subject to peer review or publication; (3) the
> known or potential rate of error of the technique or theory when
> applied; (4) the existence and maintenance of standards and
> controls; and (5) the degree to which the technique or theory
> has been generally accepted by the scientific community.

United States v. Reynolds, 626 F. App'x 610, 614 (6th Cir. 2015) (citing *Daubert*, 509

U.S. at 593-95).

Here, the Government argues that Dr. Yonovitz's opinion, as articulated in the

Report, cites to research that is decades old and incongruous to the facts in this case.

(Doc. 61 at 6). The Government also argues that "earwitness" and voice identification

research is significantly less developed, and—citing to a 2003 law review article—asserts

that courts rarely permit expert testimony on the topic. (*Id*. at 5-6). Finally, the

Government states that Rule 901 permits authentication by voice identification and that

the advisory notes specifically state that voice identification is "not a subject of expert

testimony." (*Id*.) Incidentally, the advisory note in question dates back to 1972 and is

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supported by citation to cases published between 1935 and 1952. In other words, as to

each of the Government's arguments, the citations are also, ironically, "decades old."

Moreover, in his response in opposition, Defendant attaches Dr. Yonovitz's

supplemental list of supporting research on the topic of earwitness identifications, all of

which are significantly more recent than the research cited in the initial expert report.

(*See* Doc. 65, Ex. A). The supplemental list includes summaries of the cited research,

which summaries demonstrate *potential* relevance to some, <u>although not all</u>, of the issues

and circumstances present in the instant case.[4]

Based on the cited research, as well as Dr. Yonovitz's background, education, and

experience in the relevant areas (as identified, *supra*), the Court finds there is a

sufficiently reliable foundation in support of Dr. Yonovitz's opinions, within his area of

expertise, *i.e.*, audiology and scientific voice analysis. The Court finds no reliable basis,

however, for Dr. Yonovitz's opinions regarding law enforcement procedures, witness

credibility, and memory decay in the case of crime victims. *See* Section A and n.3,

supra. Further, the Court is prepared, if necessary, to briefly conduct a *voir dire* of the

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[4] *See*, *e.g.*, Doc. 65-1 at 1 (June 2018 publication: "We still know relatively little about the conditions that might affect the accuracy and reliability of voice identification evidence"); Doc. 65-1 at 2 (2017 study: "Participants were less accurate at identifying the male voice compared to the female voice in both present and absent lineups"); Doc. 65-1 at 2 (March 2004 publication: "When listeners were tested after a week, they made fewer false identifications if the speech sample was long"); Doc. 65-1 at 3 (2012 publication: "Individual voice and speech characteristics are important for earwitness identification"). The Court emphasizes that its identification of these selected statements is not intended to definitively address the admissibility of the studies' findings or their relevance to the instant case. The Court merely notes that Dr. Yonovitz's supplemental citations reflect more recent research underlying some of the general topics that may be helpful to jurors, assuming that the research's conclusions were based on facts analogous to those in the instant case.

expert, prior to his testimony, and outside the jury's presence, to formally address the validity of Dr. Yonovitz's method of extracting and enhancing audio for analysis, as well as his analysis of Defendant's voice and speech patterns.[5]

C. Relevance of the Expert Testimony

"[E]xpert testimony is subject to the same relevancy constraints as all other kinds of evidence." *United States v. LeBlanc*, 45 F. App'x 393, 400 (6th Cir. 2002). Thus, the opinion testimony of a qualified expert is relevant if "the expert's scientific, technical, or other specialized knowledge <u>will help the trier of fact to understand the evidence or to determine a fact in issue</u>." Fed. R. Evid. 702(a) (emphasis added).

Notably, "[t]he relevancy bar is low, demanding only that the evidence 'logically advances a material aspect of the proposing party's case.'" *LaVictor*, 848 F.3d at 442 (quoting *Messick v. Novartis Pharm. Corp.*, 747 F.3d 1193, 1196–97 (9th Cir. 2014)). Nevertheless, the proponent of the expert testimony must make a preliminary showing, by a preponderance of the evidence, that the proffered testimony "is 'sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute….'" *LeBlanc*, 45 F. App'x at 400 (citations omitted).

Moreover, it is "well settled that 'necessity' is not a condition precedent for the admissibility of opinion testimony under Federal Rule of Evidence 702 ….'" *United States v. Brawner*, 173 F.3d 966, 969 (6th Cir. 1999). However, the Court may consider

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[5] *United States v. Reynolds*, 626 F. App'x 610, 614 (6th Cir. 2015) ("A district court is not required to hold a *Daubert* hearing before admitting expert testimony") (citing *Clay v. Ford Motor Co.,* 215 F.3d 663, 667 (6th Cir. 2000)).

"whether the untrained layman would be qualified to determine intelligently and to the best possible degree the particular issue without enlightenment from those having a specialized understanding of the subject involved in the dispute." *United States v. Rios*, 830 F.3d 403, 413 (6th Cir. 2016) (quoting Fed. R. Evid. 702, Adv. Comm. Notes). In that regard, expert testimony that <u>aids the jury</u> in weighing the credibility of a victim is not improper, as long as the issue of credibility is not one that can be easily assessed by the average juror. *See LaVictor*, 848 F.3d at 442 ("courts draw a distinction between expert testimony offered on a witness's motivation to lie in a straightforward case where the benefit can be readily understood by a layperson versus a case involving a more esoteric subject matter …").

Here, the Court finds that the expert may testify regarding the limited factors—as previously identified, *supra*—that are outside the common knowledge of jurors, and which factors contribute generally to the reliability or unreliability of a voice identification. In other words, the testimony is admissible only to provide the jurors with the tools, that the average juror would not already possess, <u>for the jurors</u> to weigh the credibility of the earwitnesses' identifications. In this regard, Opinions 2 and 4 of Dr. Yonovitz's opinion, *i.e.*, the lack of vocal anomalies and the impact of a poor-quality voice exemplar, are within the scope of Dr. Yonovitz's expertise, and are relevant and helpful to the jury.

However, the remaining aspects of Dr. Yonovitz's proposed testimony—Opinions 1 and 3—are either outside the area of his expertise, are not in dispute, are based on insufficient research, or are plainly obvious to an average juror.

As to Opinion 1, Dr. Yonovitz's conclusions are outside his area of expertise and also address issues that are not in dispute. Specifically, Lt. Mathews—who is expected to testify at trial—readily acknowledged during his testimony at the suppression hearing that he had not previously conducted a voice identification procedure, that the single-voice exemplar was not ideal, and that the procedure did not comport with standard visual identification procedures. Thus, Dr. Yonovitz's proposed testimony regarding Lt. Mathews utilizing an "untested" and "inappropriate procedure" is plainly not in issue, is unhelpful, and risks confusing the jurors regarding Lt. Mathews' motives, rather than being informative with respect to Dr. Yonovitz's actual area of scientific expertise— audiology and voice analysis.

Additionally, prior to the voice identification procedure, Lt. Mathews read the victims an admonishment, setting forth expressly that:

> The fact that the audio is being played for you should not influence your judgment. You should not conclude or guess that the audio contains the voice of the person who committed a crime involving you. You are not obligated to identify anyone. It is just as important to free innocent persons from suspicion as to identify guilty parties.

(*See* Doc. 45 at 7). Lt. Mathews also admonished the victims, on more than one occasion, not to discuss the identification process with anyone, whether they recognized the voice or not. (*Id.*) And at no point did Lt. Mathews indicate one way or another whether the voice on the recording was a likely suspect. Indeed, Lt. Mathews testified that, at the time of the voice identifications, he was uncertain as to whether Defendant

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was in fact a viable suspect. (*Id.* at 5, 7). Also, Lt. Mathews not only made a *written* record of the identifications, he also recorded them on *video*. (*Id.* at 8).

In short, with the exception of the single-voice exemplar (the use of which Lt. Mathews thoroughly explained in his testimony during the suppression hearing), each step that Lt. Mathews took during the voice identifications went above and beyond the best practices that Dr. Yonovitz outlines in his Report. Yet, Dr. Yonovitz makes no such acknowledgement in his Report. This too leads the Court to conclude that the proposed testimony regarding "inappropriate procedures" and the introduction of "substantial bias" is unsupported by the analysis, is misleading and confusing to the jury, and is unduly prejudicial.

Moreover, the Report makes certain statements that, *inter alia*, an identification obtained by adhering to the ideal procedures "may have stronger evidentiary value than one obtained without these procedures," and that use of the best practices "can minimize the effect of external influences on a witness' memory." At the heart of these statements is the notion that the best practices are *better* than the alternative. This does not, however, support Dr. Yonovitz's hyperbolic conclusions that the procedure was "inappropriate" and "introduced **substantial bias** …." (Doc. 70 at 14) (emphasis in original).

On that note, the Court emphasizes that any statements by Dr. Yonovitz regarding the "evidentiary value" of the identifications are <u>wholly inappropriate</u> and no such testimony will be permitted. Similarly, statements such as, "[c]learly … there was bias introduced that yielded an unreliable result," are inappropriate determinations that do

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indeed invade the province of the jury and are widely outside of Dr. Yonovitz's demonstrated area of expertise. Thus, the Court emphasizes strenuously that no such testimony will be permitted.

As to Opinion 3, as the Court previously noted, Dr. Yonovitz acknowledged in 2015 that he is "**not at all familiar with the research that's been done in the area of how the human mind stores sensory memories from a traumatic event**," that he has "**never testified or been qualified as an expert on the issue of memory when it comes to auditory identification**," and that he "**never testified on issues in memory for witnesses, only on matching of voices from an unknown to a known**." *Aviles-Barroso*, 477 S.W.3d at 386 (emphasis added). Thus, the Court finds that any testimony offered by Dr. Yonovitz with regard to decay in a victim's memory for a voice identification—*i.e.*, that memory of a voice heard on one occasion may fade over time—is not sufficiently based on reliable expert knowledge and would therefore be of no assistance to the jurors. *See United States v. Leon*, 966 F.2d 1455 (6th Cir. 1992) ("the assistance provided by expert testimony is of dubious value where 'the level of reliability of the expert testimony had not surpassed the quality of [a] common sense evaluation' which could be performed by the members of a jury") (quoting *United States v. Smith,* 736 F.2d 1103, 1106 (6th Cir. 1984)).

Accordingly, the Court has identified the relevant parameters for Dr. Yonovitz's testimony and finds that testimony within said parameters only would indeed assist the jury in making the ultimate determination regarding the weight and credibility of the pretrial identifications.

IV. CONCLUSION

Based upon the foregoing, the Government's *Daubert* motion (Doc. 61) is

GRANTED in part and DENIED in part.

IT IS SO ORDERED.

Date: July 1, 2019   *s/ Timothy S. Black*
                                                           Timothy S. Black
                                                           United States District Judge